

(12) UK Patent Application (19) GB (11) 2 375 905 (13) A

(43) Date of A Publication 27.11.2002

(21) Application No 0206446.7

(22) Date of Filing 19.03.2002

(30) Priority Data

(31) 0103779

(32) 20.03.2001

(33) FR

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(51) INT CL⁷

H04B 1/48, H03K 17/76

(52) UK CL (Edition T)

H3P PAD

H3T T1C2 T2B3 T2F4 T2RX T2T2X

H4L LECSX L209

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(59) Field of Search

UK CL (Edition T) H3P PAD, H4L LECSX

INT CL⁷ H03K 17/74 17/76, H04B 1/44 1/48

(54) Abstract Title

A GSM-DCS dual-band transmit-receive switch for a mobile telephone

(57) Receive-transmit switches 1,2 for two bands are coupled by a diplexer 3 to an antenna 4. In switch 1, PIN diodes D1 and D2 are rendered conductive by a positive signal at control terminal SW1 to couple the transmit port EM1 to the diplexer and to isolate the receive port RE1. When the signal at terminal SW1 is removed, the transmit port EM1 is isolated and the receiver port RE1 is coupled to the diplexer via quarter-wave section Q1. The signal at terminal SW4 acts correspondingly on switch 2. To improve the isolation of receiver port RE1 when transmitter port EM2 is active, a positive signal at terminal SW4 activates diode D2 in switch 1 as well as the diodes D3 and D4 in switch 2. Terminal SW1 acts analogously on D4. The diodes DA prevent current flowing from one control port to the other.

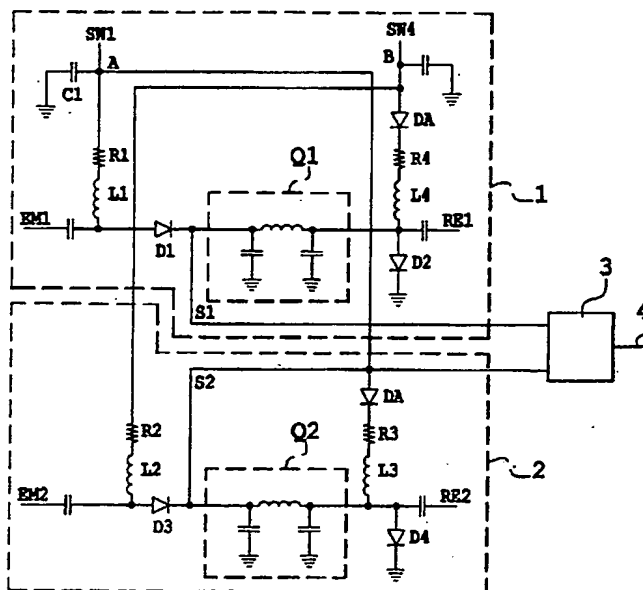


Fig. 3